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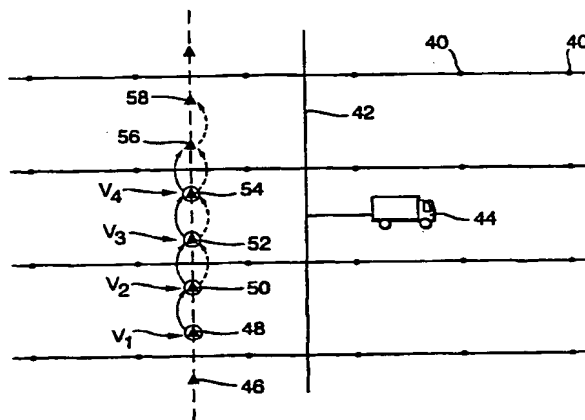
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[Continued on next page]

(54) Title: IMPROVED SEISMIC SURVEYING METHOD



(57) Abstract: An improved method of acquiring seismic data using a plurality of vibratory seismic sources including the steps of deploying a seismic sensor; deploying a plurality of vibratory seismic sources at different source points; simultaneously actuating the seismic sources; acquiring seismic data attributable to the seismic sources using the seismic sensor; redeploying at least two seismic sources, one seismic source being thereby positioned at a source point previously occupied by the other seismic source; simultaneously actuating the redeployed seismic sources; and acquiring seismic data attributable to the redeployed seismic sources using said seismic sensor. The present invention also involves an improved method of acquiring seismic data using a plurality of vibratory seismic sources, where each seismic source is capable of producing seismic energy within given frequency ranges, including the steps of deploying a seismic sensor; deploying a plurality of vibratory seismic sources at different source points; simultaneously actuating the seismic sources in such a manner that the frequency range of the seismic energy produced by one seismic source is substantially outside the frequency range of the seismic energy produced by another seismic source; and acquiring seismic data attributable to the seismic sources using the seismic sensor.

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